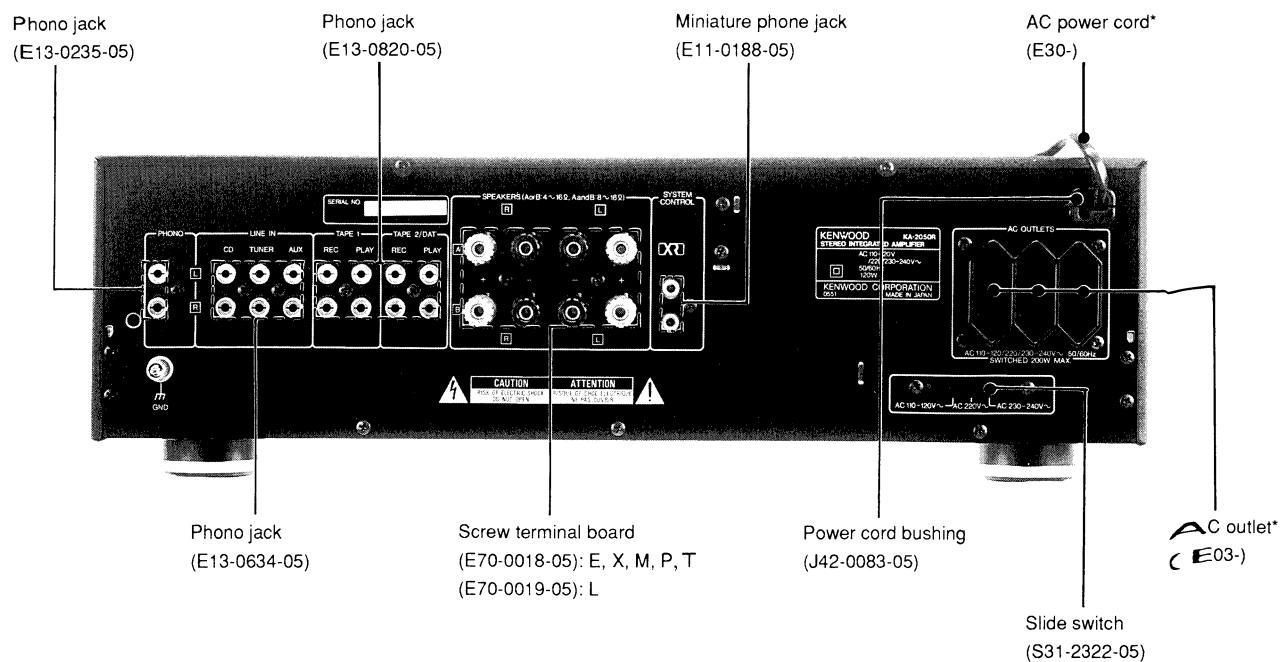
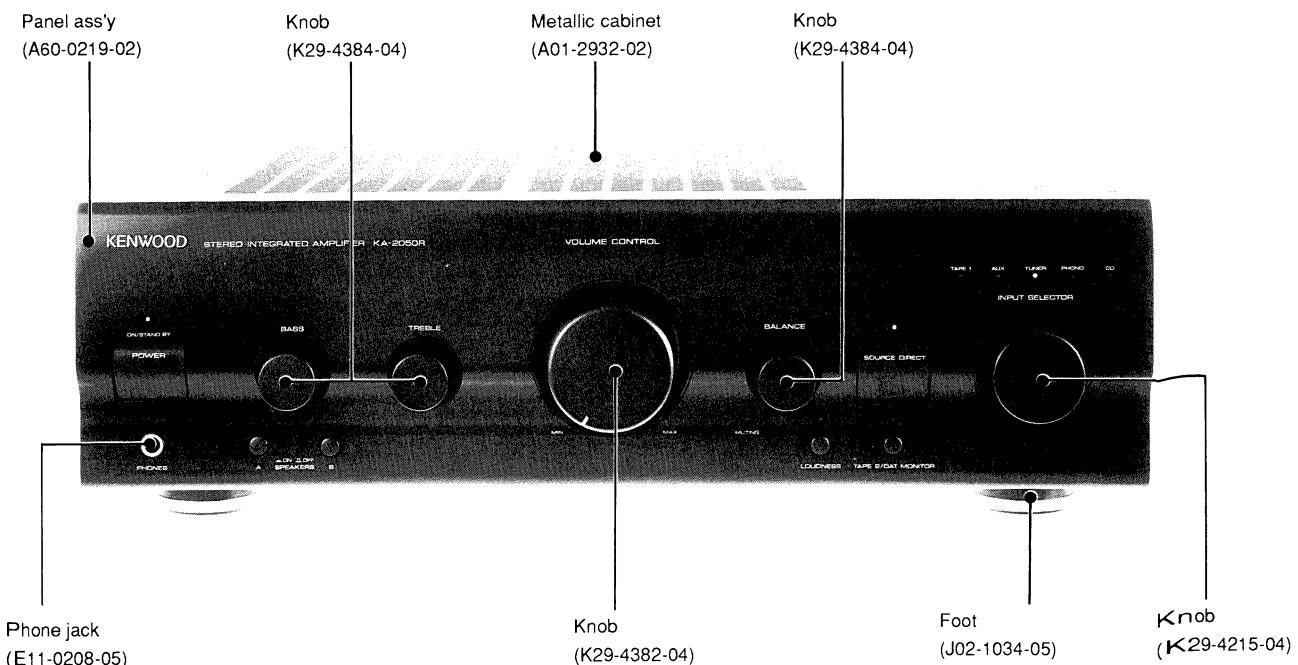


STEREO INTEGRATED AMPLIFIER  
**KA-2050R/3050R**  
 SERVICE MANUAL

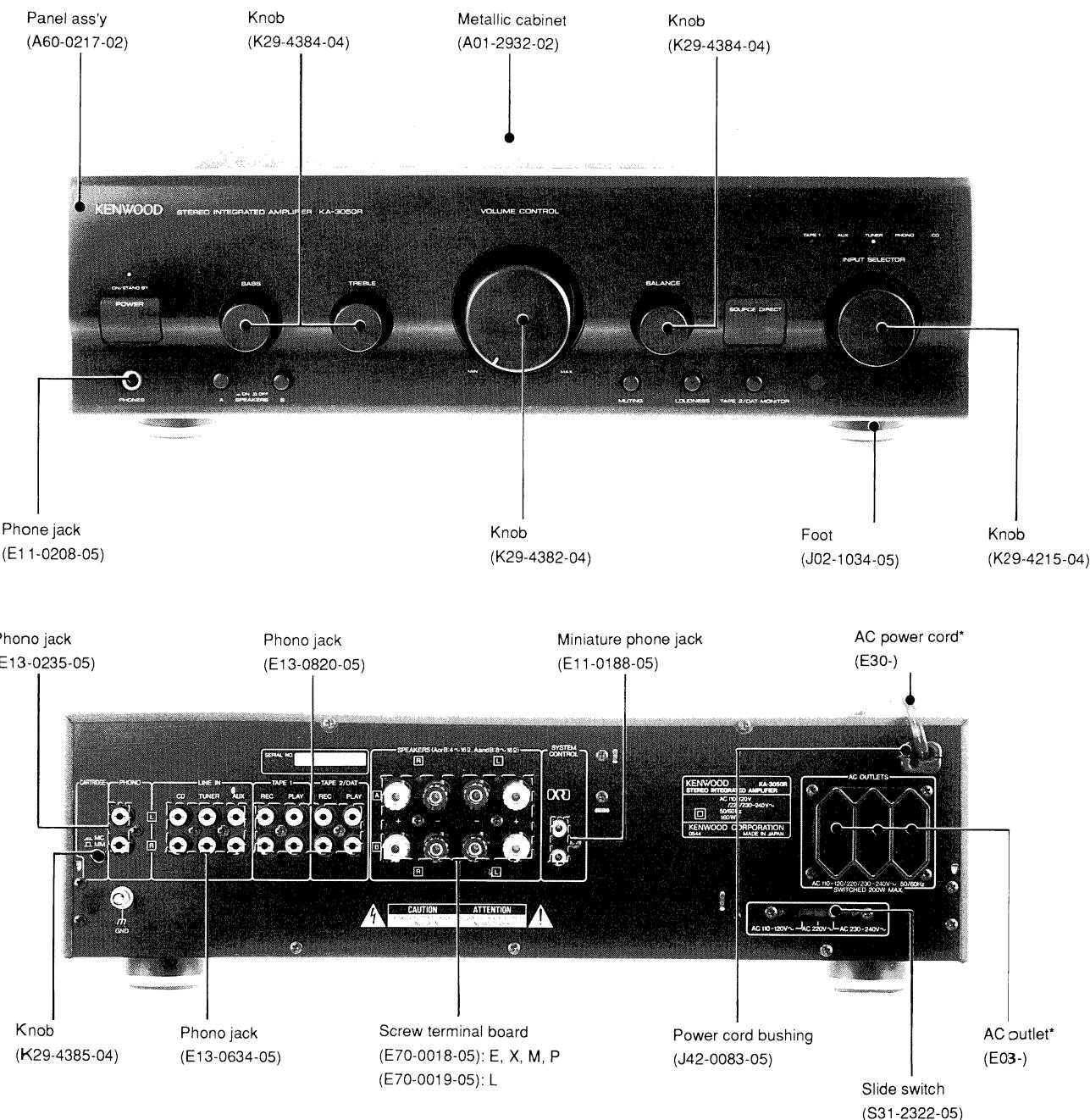
KENWOOD

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 B51-4546-00 (S) 2349

(KA-2050R)



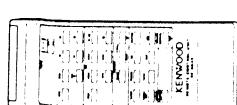
# KA-2050R/3050R



\* Refer to parts list on page 17.

## Accessories

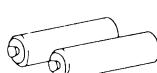
- Remote control unit .... 1



(A70-0597-05)

(A09-0094-08) : Battery cover

- Batteries (R03/UM-4/  
"AAA") ..... 2



- AC plug adaptor ..... 1  
(Except for some areas)  
For the unit with a European AC plug in areas other than Europe.



(E03-0115-05)

# KA-2050R/3050R

## ADJUSTMENT/REGLAGES/ABGLEICH

### ADJUSTMENT

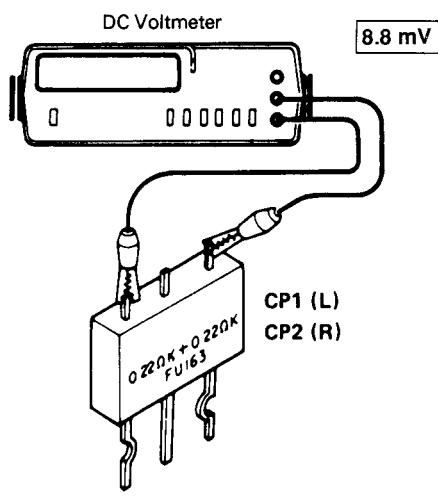
No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	AMPLIFIER SETTING	ALIGNMENT POINTS	ALIGN FOR	FIG.
Unless otherwise specified, set the respective switches as follows: POWER: ON SPEAKER: B REC OUT: OFF SELECTOR: PHONO							
1	IDLE CURRENT	-	Connect a DC voltmeter across CP1 (L) CP2 (R) (X09-)	VOLUME: 0	VR1 (L) VR2 (R) (X09-)	8.8 mV	(a)

### REGLAGES

N	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DE L'AMPLIFICATEUR	POINTS DE L'ALIGNEMENT	ALIGNER POUR	FIG.
Sauf indication contraire, régler comme suit les commandes respectives: POWER:ON SPEAKER: B REC OUT: OFF SELECTOR:PHONO							
1	COURANT DE POLARISATION	-	Connecter un voltmètre de CC SUR CP1 (G) CP2 (D) (X09-)	VOLUME: 0	VR1 (G) VR2 (D) (X09-)	8.8 mV	(a)

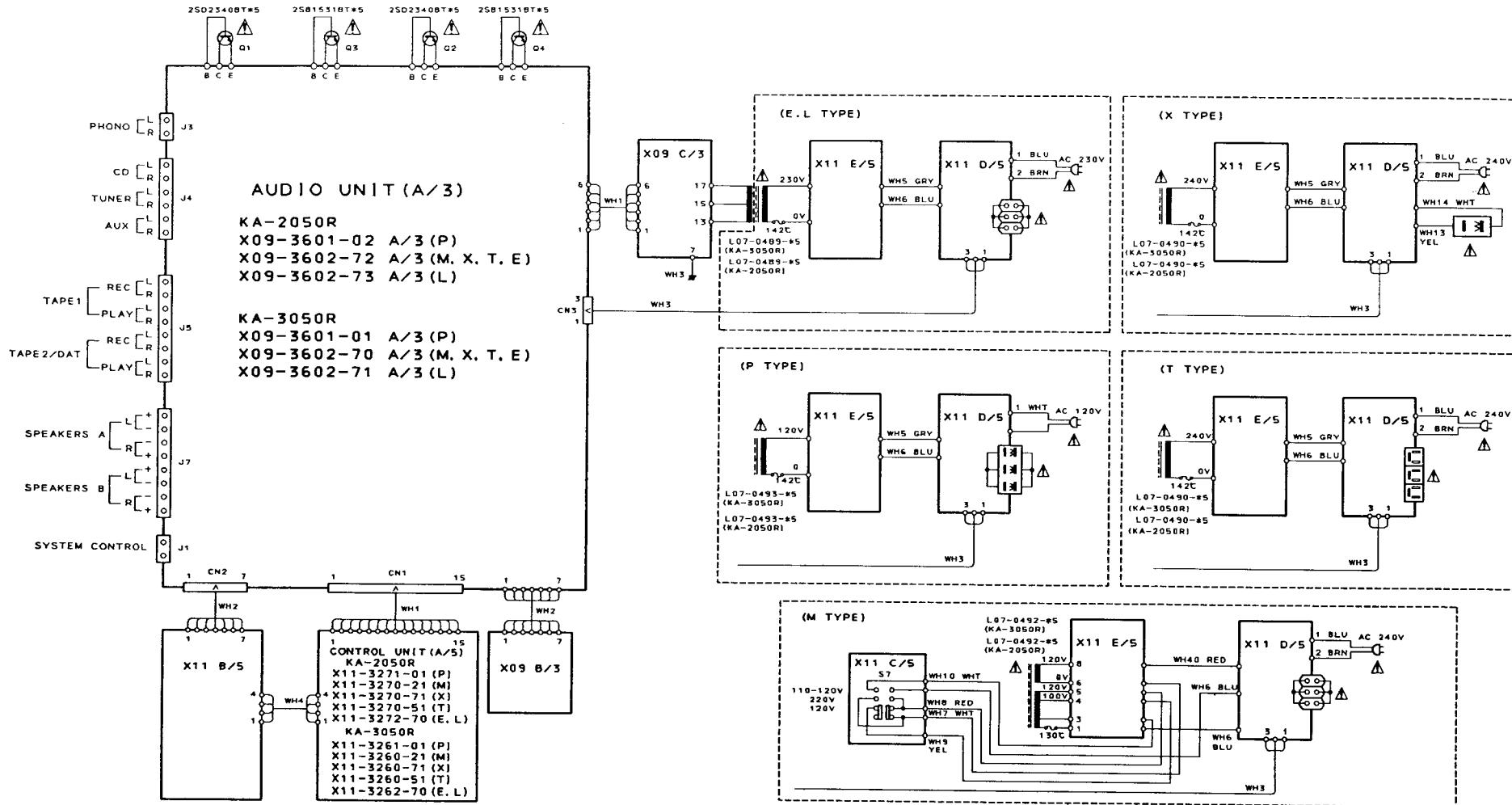
### ABGLEICH

NR.	GENGENSTAND	EINGANGS-EINSTELLUNG	AUSANG-EINSTELLUNG	VORSTÄRKER-EINSTELLUNG	ABGLEICHE-PUNKTE	ABGLEICHEN FÜR	ABB.
Wenn nicht anders angegeben, die einzelnen Schalter wie folgt einstellen: POWER: ON SPEAKER: B REC OUT: OFF SELECTER: PHONO							
1	LEERLAUFSTROM	-	Einen Gleichspannungsmesser über CP1 (L) CP2 (R) anschließen. (X09-)	VOLUME: 0	VR1 (L) VR2 (R) (X09-)	8.8 mV	(a)



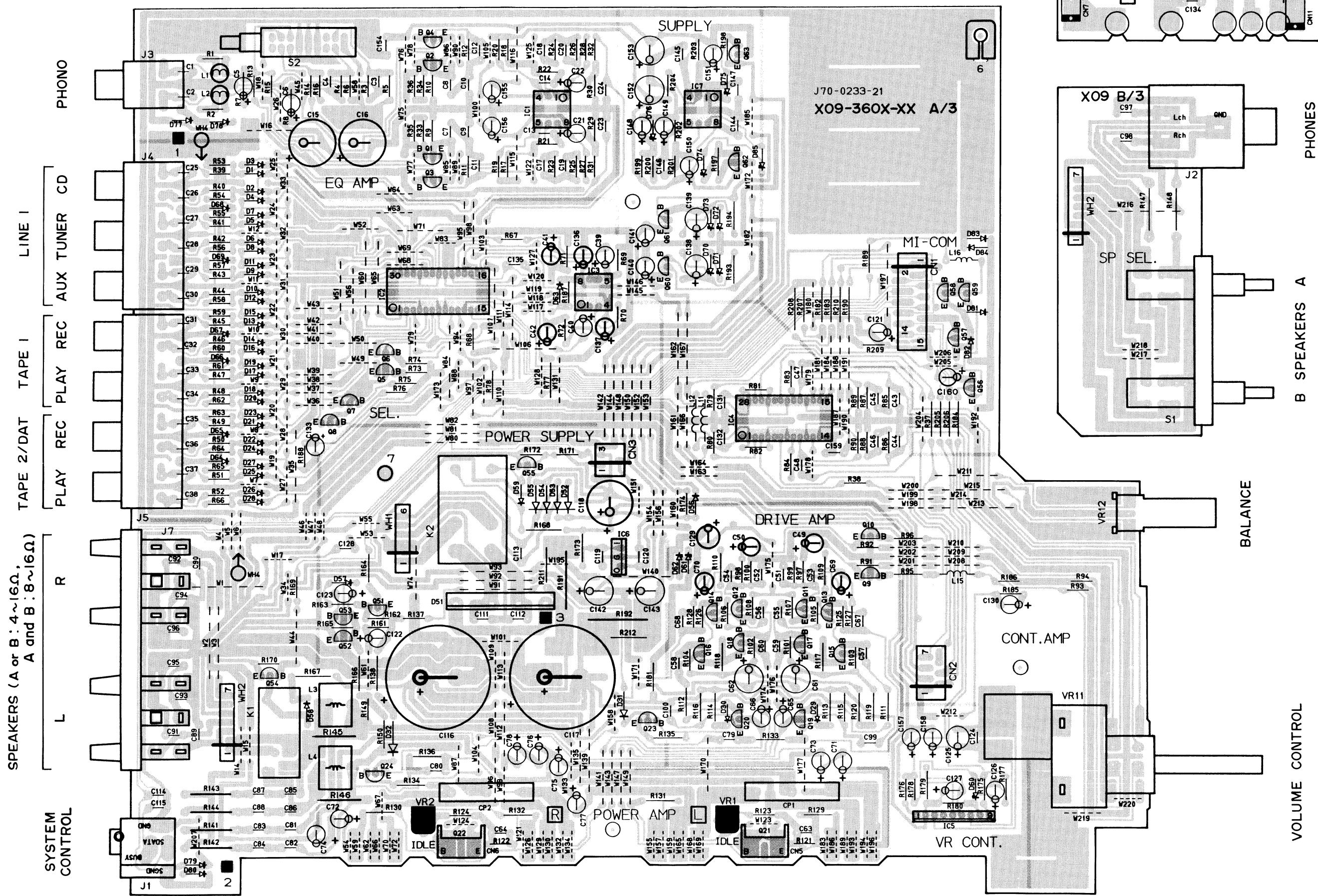
(a)

## WIRING DIAGRAM



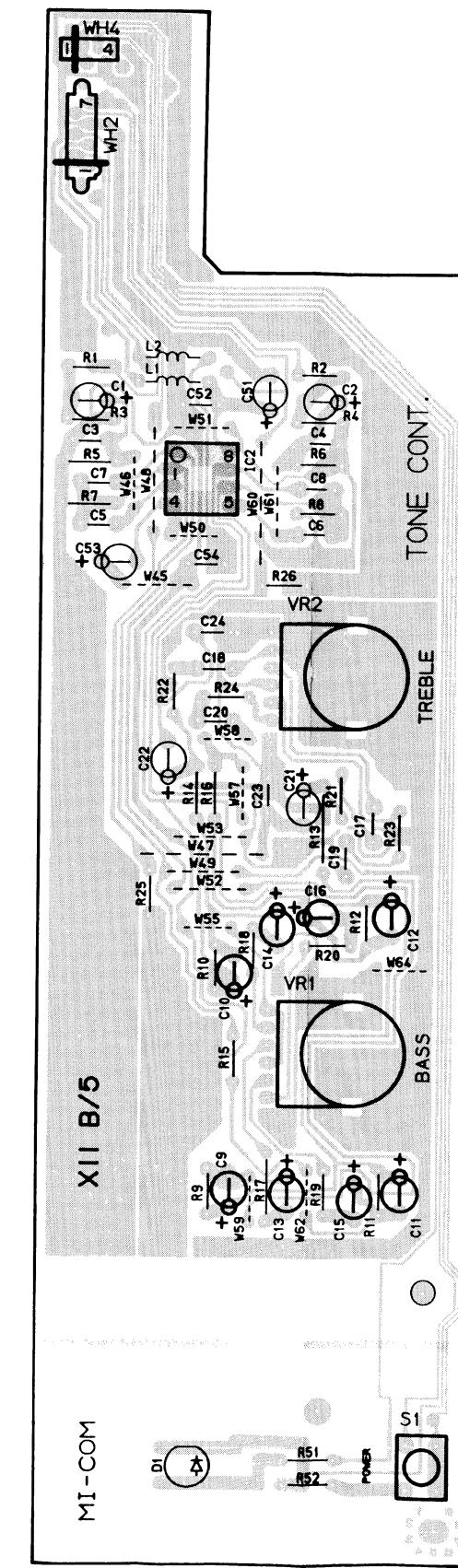
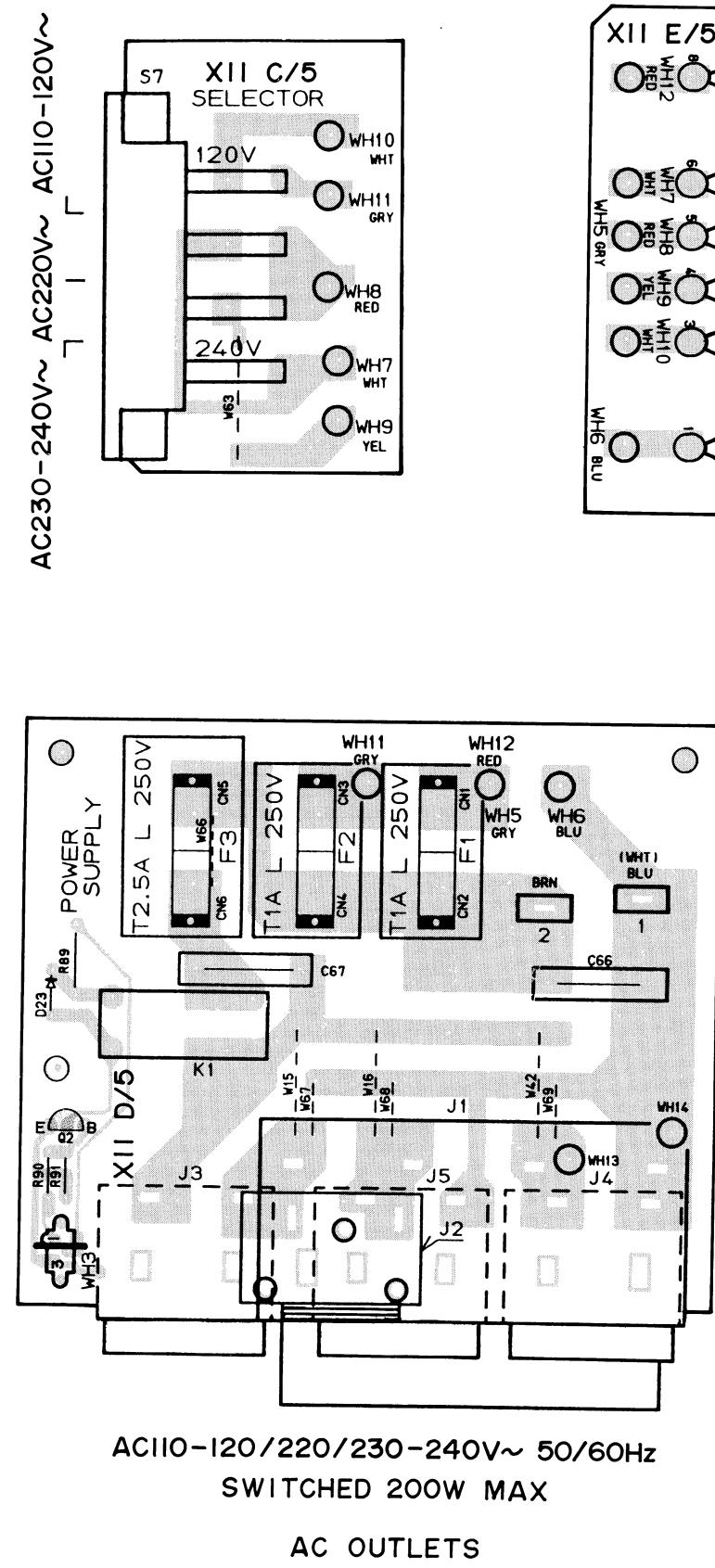
# PC BOARD (Component side view)

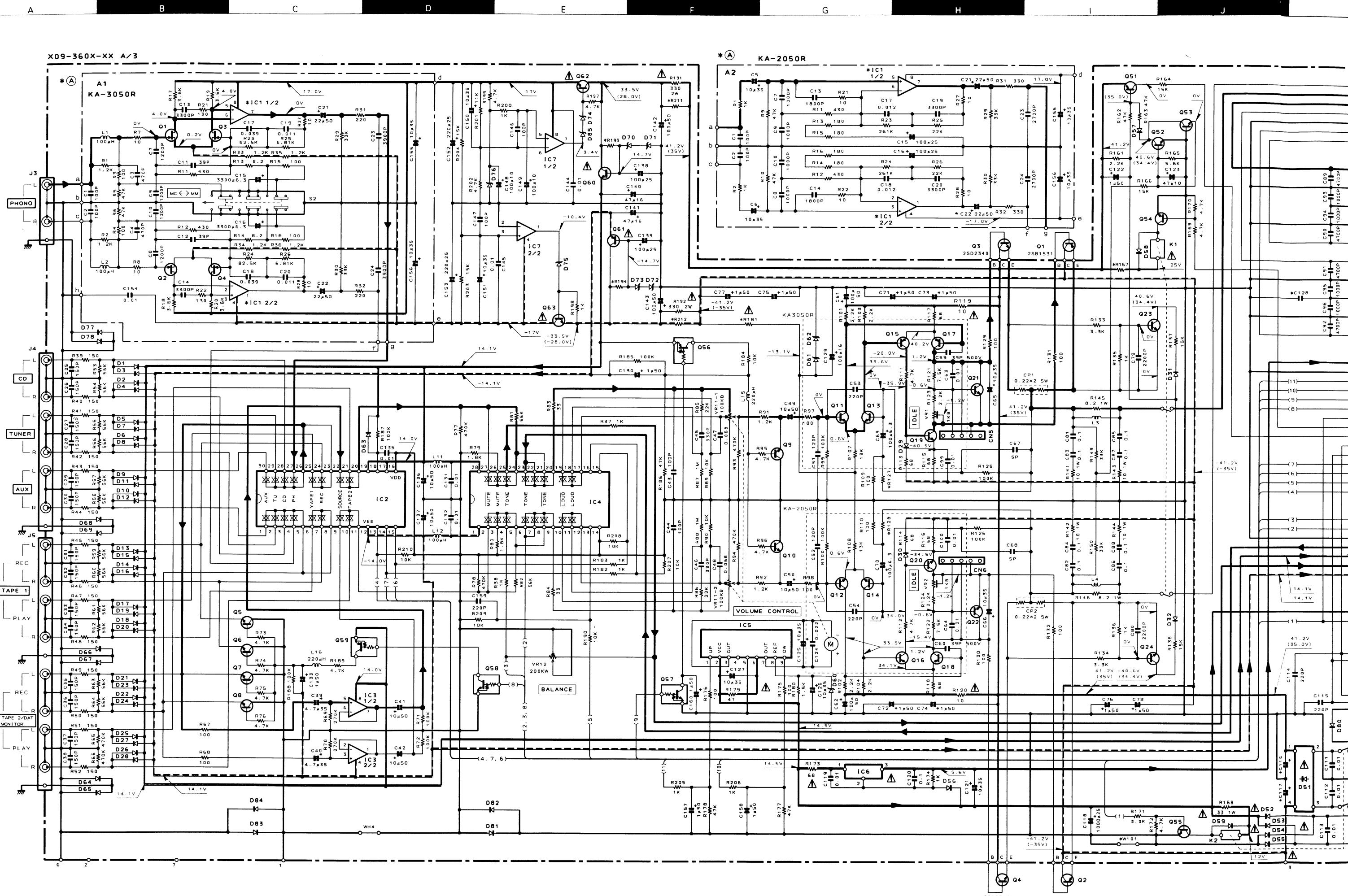
AUDIO UNIT

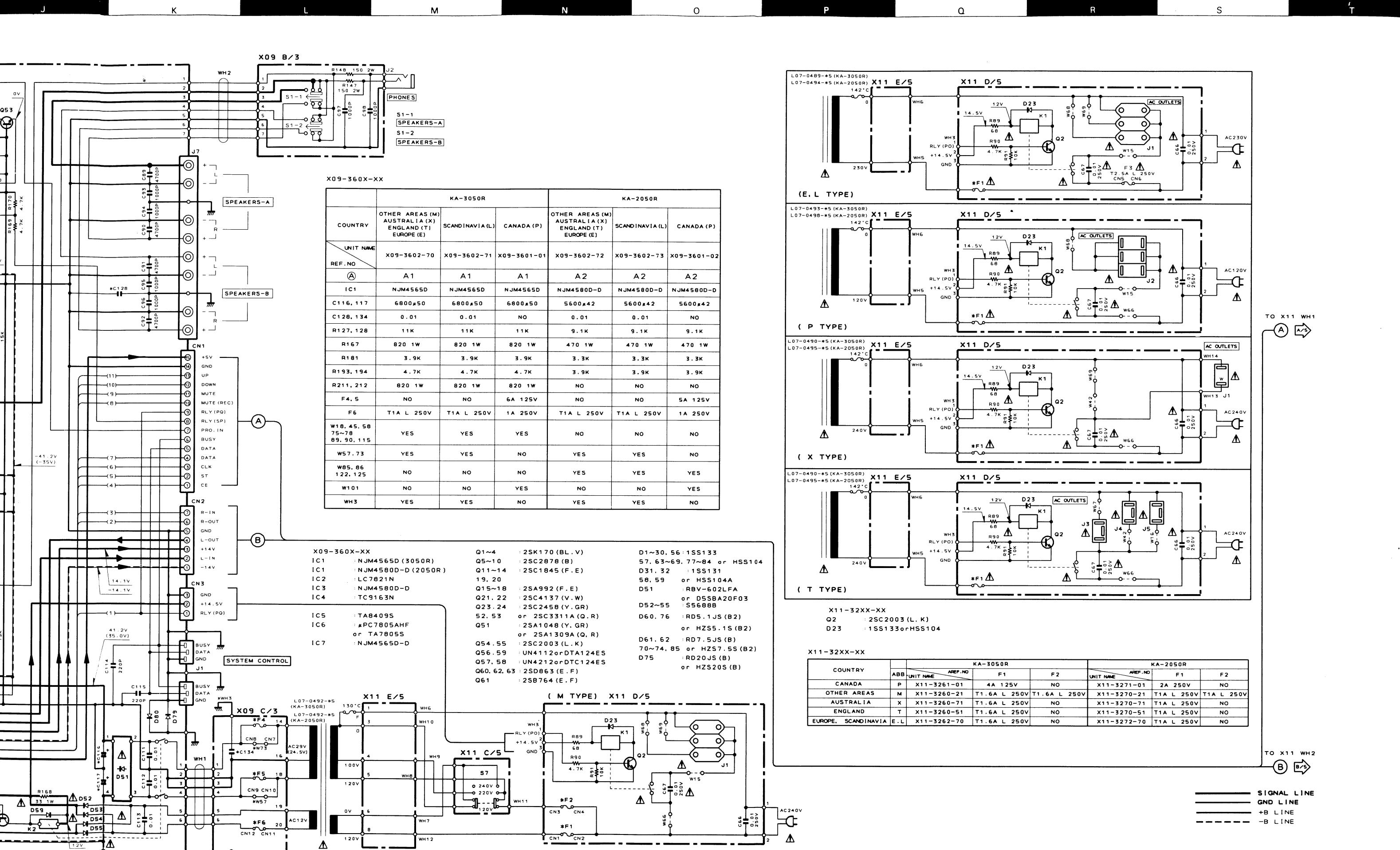


# PC BOARD (Component side view)

## CONTROL UNIT

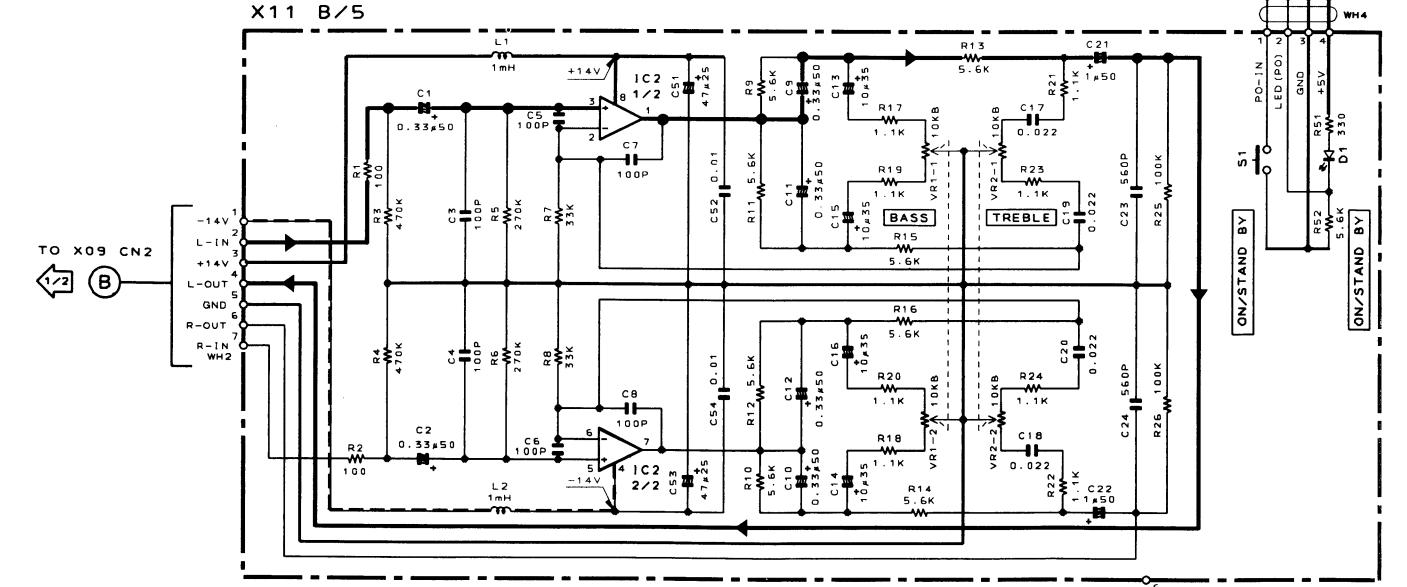
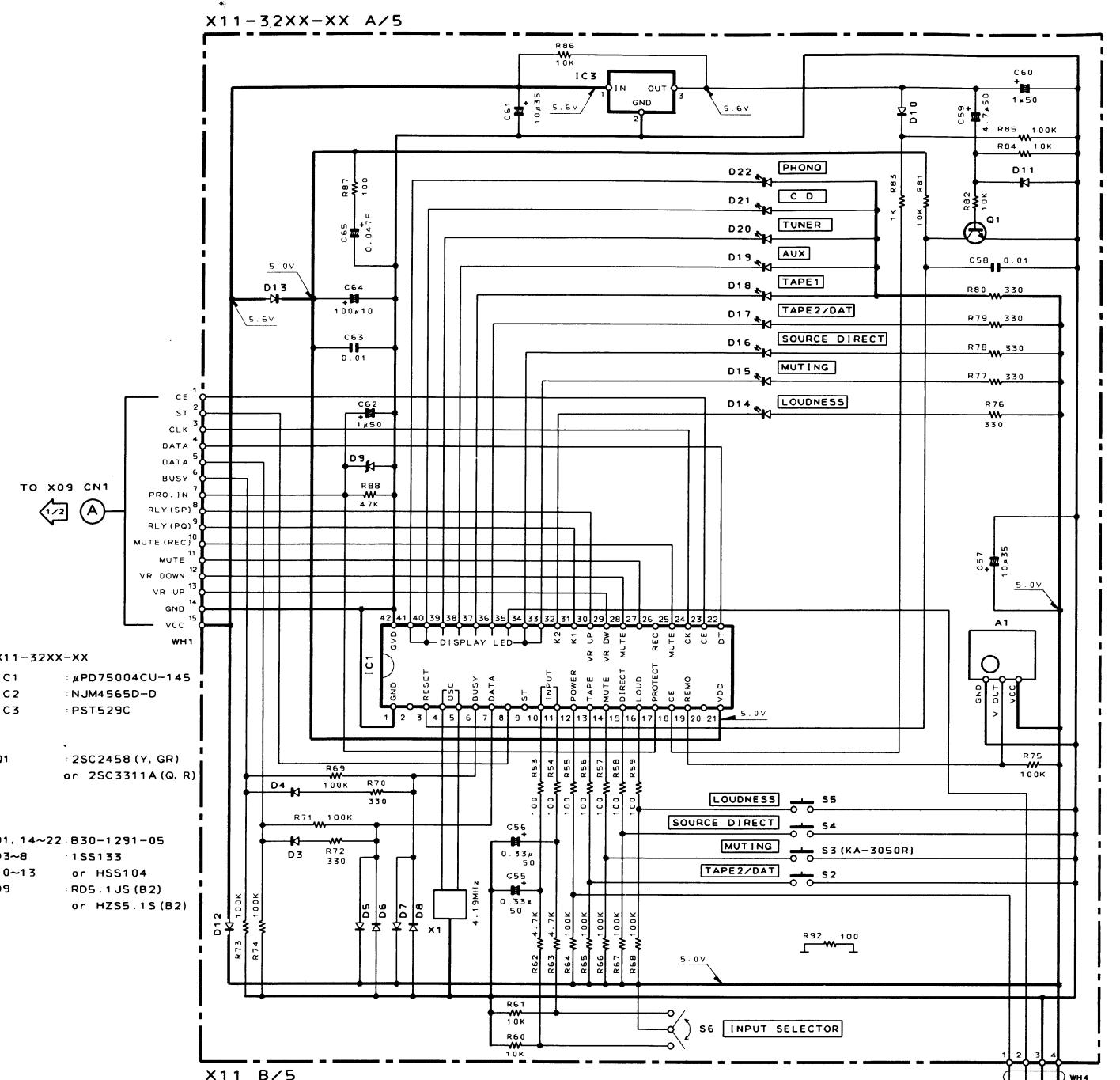






KA-2050R/3050F  
KENWOOD

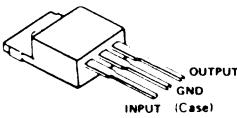
Y08-4582-70



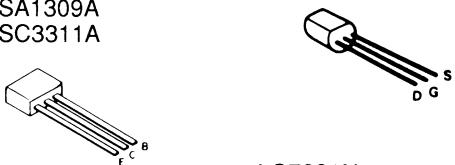
SIGNAL LINE  
GND LINE  
+8 LINE  
-8 LINE

HSS104  
HSS104A  
HZS5.1S  
RD5.1JS  
S568B  
ISS131  
ISS133

UN4212  
2SA1309A  
2SC3311A



2SK170



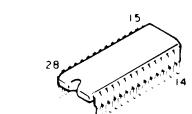
LC7821N



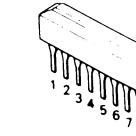
2SA992  
2SB764  
2SC1845  
2SC2003  
2SC2878  
2SD863



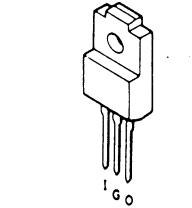
TC9163N



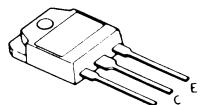
TA8409S



TA7805S



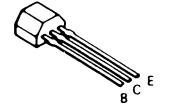
2SB1531BT\*5  
2SD2340BT\*5



NJM4580D-D



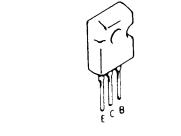
DTA124ES  
DTC124ES  
UN4112  
2SA1048  
2SC2458



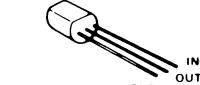
UPD75004CU-145



2SC4137



PST529C



DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

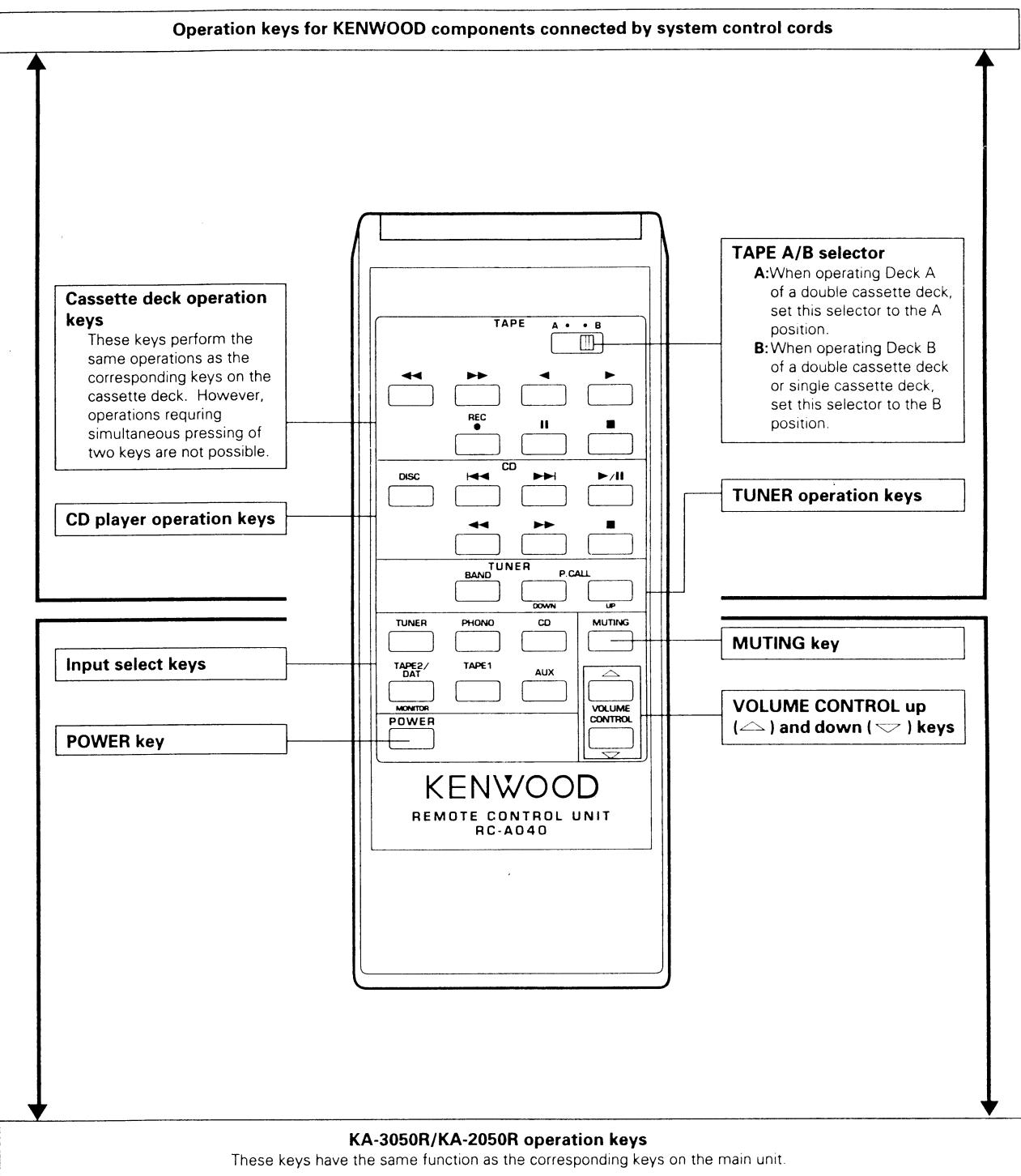
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). **A**: Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

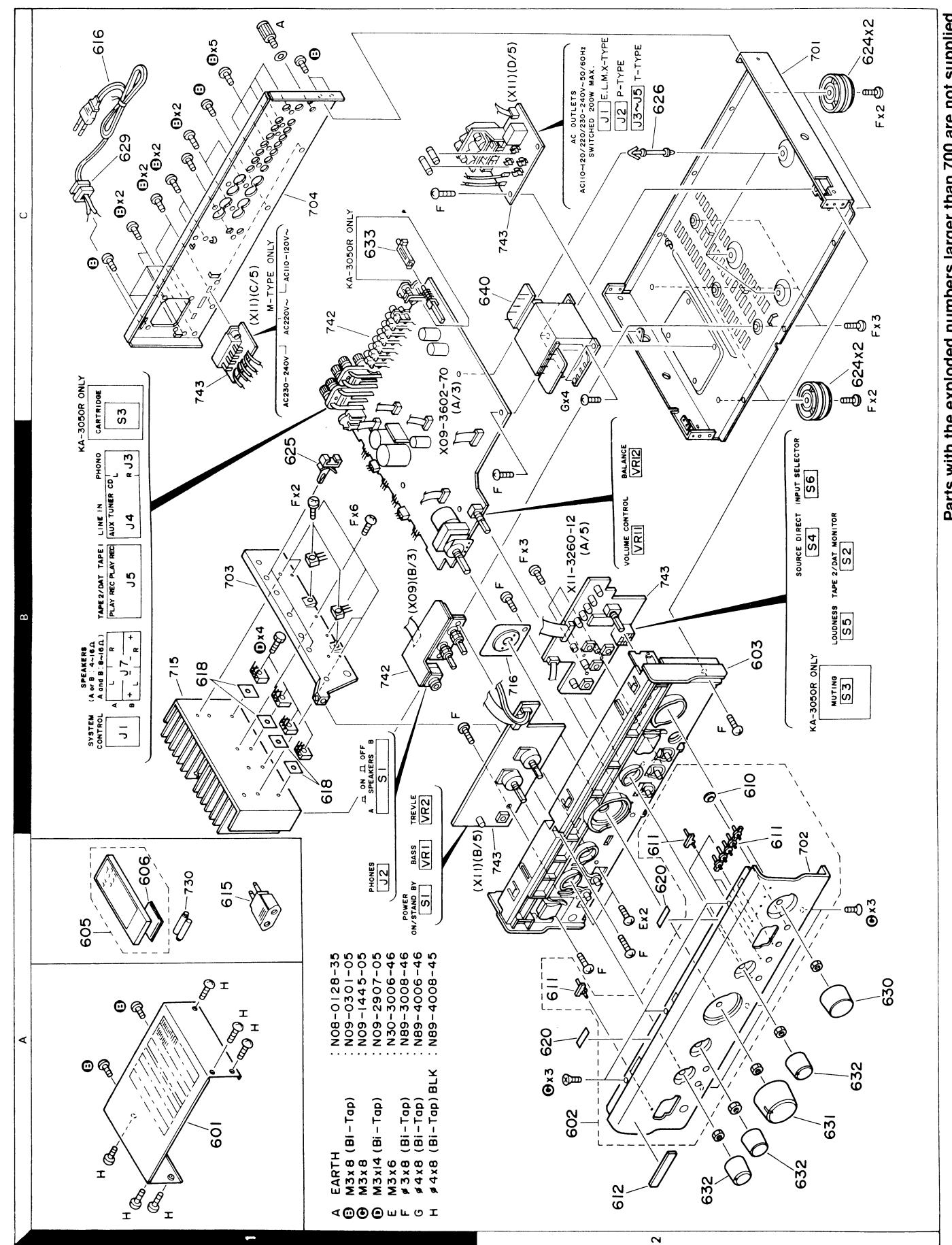
**KA-2050R/3050R**  
**KENWOOD**

Y08-4582-70

## REMOTE CONTROL OPERATION



## EXPLODED VIEW



voltmeter.  
individual  
e à haute  
tu fait des  
e mesure

mit einem  
schwanken  
einzelnen

critical  
s (refer to  
reduce the  
measurements  
obtained from  
customer).

050R  
D  
15

# KA-2050R/3050R

## PARTS LIST

\* New Parts  
 Parts without Parts No. are not supplied.  
 Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
 Teile ohne Parts No. werden nicht geliefert.

No. 1

Ref. No.	Address	New Parts No.	Parts No.	Description	Desti- nation 地 区	Re- marks 備 考
参照番号	位 置	新 品 番 号	部 品 番 号	部 品 名 規 格		
<b>KA-2050R</b>						
601	1A	*	A01-2932-02	METALLIC CABINET		
602	2A	*	A60-0219-02	PANEL ASSY		
603	2B	*	A22-1558-01	SUB PANEL		
605	1A	*	A70-0597-05	REMOTE CONTROLLER ASSY		
606	1A	*	A09-0094-08	BATTERY COVER		
610	2B		B11-0237-14	COLOR FILTER		
611	2A	*	B12-0196-04	INDICATOR		
612	2A		B43-0287-04	KENWOOD BADGE	X	
-			B46-0096-33	WARRANTY CARD	P	
-			B46-0121-13	WARRANTY CARD		
-			B46-0122-23	WARRANTY CARD	EL	
-			B46-0143-13	WARRANTY CARD	T	
-		*	B60-0835-00	INSTRUCTION MANUAL (ENGLISH)	ELP	
-		*	B60-0836-00	INSTRUCTION MANUAL (FRENCH)	EL	
-		*	B60-0837-00	INSTRUCTION MANUAL (DE, DU, IT)		
-		*	B60-0965-00	INSTRUCTION MANUAL (CHINESE)	M	
-		*	B60-0966-00	INSTRUCTION MANUAL (SPANISH)	ELM	
△ 615	1A		E03-0115-05	AC PLUG ADAPTER	M	
△ 616	1C		E30-0459-05	AC POWER CORD	ELM	
△ 616	1C		E30-0974-05	AC POWER CORD	P	
△ 616	1C		E30-1341-05	AC POWER CORD	X	
△ 616	1C		E30-1416-05	AC POWER CORD	T	
△ J1	2C		E03-0114-05	AC OUTLET	X	
620	2A		G11-0153-04	SOFT TAPE (80X12X3)		
-		*	H50-0321-04	ITEM CARTON CASE		
-		*	H10-5296-02	POLYSTYRENE FOAMED FIXTURE		
-		*	H10-5297-02	POLYSTYRENE FOAMED FIXTURE		
-			H25-0225-04	PROTECTION BAG (650X450X0.03)	ELXMP	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	ELXMP	
-			H25-0651-04	PROTECTION BAG (0232 PRINTED)	T	
-			H25-0654-04	PROTECTION BAG (0225 PRINTED)	T	
624	2C		J02-1034-05	FOOT		
625	1B		J61-0033-05	WIRE BAND		
626	1C		J19-3331-05	UNIT HOLDER		
629	1C		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
630	2A		K29-4215-04	KNOB INPUT SELECTOR		
631	2A	*	K29-4382-04	KNOB VOLUME CONTROL		
632	2A	*	K29-4384-04	KNOB BASS, TREBLE, BALANCE		
△ 640	2C	*	L07-0494-05	POWER TRANSFORMER	EL	
△ 640	2C	*	L07-0495-05	POWER TRANSFORMER	TX	
△ 640	2C	*	L07-0497-05	POWER TRANSFORMER	M	
△ 640	2C	*	L07-0498-05	POWER TRANSFORMER	P	
A	1C		N08-0128-35	BINDING POST (EARTH)		
B	1A, 1C		N09-0301-05	TAPITIE SCREW (3X8)		
C	2A		N09-1445-05	SET SCREW (M3X8)		
D	1B	*	N09-2907-05	SEMS (TAPITIE SCREW)(3X14)		
E	2A		N30-3006-46	PAN HEAD MACHINE SCREW		
F	1A, 1B		N89-3008-46	BINDING HEAD TAPITIE SCREW		
G	2C		N89-4006-46	BINDING HEAD TAPITIE SCREW		

L:Scandinavia  
 K:USA  
 P:Canada  
 Y:PX(Far East, Hawaii)  
 T:England  
 E:Europe  
 Y:AAFE(S)Europe)  
 X:Australia  
 M:Other Areas

3 : KA-3050R  
 2 : KA-2050R

△ indicates safety critical components.

## AUDIO UNIT

X09-3601-01	KA-3050R P
X09-3601-02	KA-2050R P
X09-3602-70	KA-3050R M, X, T, E
X09-3602-71	KA-3050R L
X09-3602-72	KA-2050R M, X, T, E
X09-3602-73	KA-2050R L

## CONTROL UNIT

X11-3260-21	KA-3050R M
X11-3260-51	KA-3050R T
X11-3260-71	KA-3050R X
X11-3261-01	KA-3050R P
X11-3262-70	KA-3050R E, L
X11-3270-21	KA-2050R M
X11-3270-51	KA-2050R T
X11-3270-71	KA-2050R X
X11-3271-01	KA-2050R P
X11-3272-70	KA-2050R E, L

## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No. 2

Ref. No.	Address	New Parts	Parts No.	Description	Desti-nation	Re-marks
参照番号	位 置	新	部品番号	部品名 / 規 格	仕 向	備考
H	1A		N89-4008-45	BINDING HEAD TAPTTIE SCREW		
Q1 , 2		*	2SB1531BT*5	TRANSISTOR		
Q3 , 4		*	2SD2340BT*5	TRANSISTOR		
<b>KA-3050R</b>						
601	1A	*	A01-2932-02	METALLIC CABINET		
602	2A	*	A60-0217-02	PANEL ASSY		
603	2B	*	A22-1558-01	SUB PANEL		
605	1A	*	A70-0597-05	REMOTE CONTROLLER ASSY		
606	1A	*	A09-0094-08	BATTERY COVER		
610	2B	*	B11-0237-14	COLOR FILTER		
611	2A	*	B12-0196-04	INDICATOR		
612	2A	*	B43-0287-04	KENWOOD BADGE		
-		B46-0096-33	WARRANTY CARD	X		
-		B46-0121-13	WARRANTY CARD	P		
-		B46-0122-23	WARRANTY CARD	BL		
-		B46-0143-13	WARRANTY CARD	T		
-		* B60-0835-00	INSTRUCTION MANUAL (ENGLISH)			
-		* B60-0836-00	INSTRUCTION MANUAL (FRENCH)	ELP		
-		* B60-0837-00	INSTRUCTION MANUAL (DE, DU, IT)	EL		
-		* B60-0965-00	INSTRUCTION MANUAL (CHINESE)	M		
-		* B60-0966-00	INSTRUCTION MANUAL (SPANISH)	ELM		
△ 615	1A	E03-0115-05	AC PLUG ADAPTER	M		
△ 616	1C	E30-0459-05	AC POWER CORD	ELM		
△ 616	1C	E30-0974-05	AC POWER CORD	P		
△ 616	1C	E30-1341-05	AC POWER CORD	X		
△ 616	1C	E30-1416-05	AC POWER CORD	T		
J1	2C	E03-0114-05	AC OUTLET	X		
618	1B	F20-1322-05	INSULATING BOARD			
620	2A	G11-0153-04	SOFT TAPE (80X12X3)			
-		* H50-0320-04	ITEM CARTON CASE			
-		* H10-5296-02	POLYSTYRENE FOAMED FIXTURE			
-		* H10-5297-02	POLYSTYRENE FOAMED FIXTURE			
-		H25-0225-04	PROTECTION BAG (850X450X0.03)	ELXMP		
-		H25-0232-04	PROTECTION BAG (235X350X0.03)	ELXMP		
-		H25-0651-04	PROTECTION BAG (0232 PRINTED)	T		
-		H25-0654-04	PROTECTION BAG (0225 PRINTED)	T		
624	2C	J02-1034-05	FOOT			
625	1B	J61-0033-05	WIRE BAND			
626	1C	J19-3331-05	UNIT HOLDER			
629	1C	J42-0083-05	POWER CORD BUSHING			
-		J61-0307-05	WIRE BAND			
630	2A	K29-4215-04	KNOB INPUT SELECTOR			
631	2A	*	K29-4382-04	KNOB VOLUME CONTROL		
632	2A	*	K29-4384-04	KNOB BASS, TREBLE, BALANCE		
633	1C	*	K29-4385-04	KNOB MM/MC		
△ 640	2C	*	L07-0489-05	POWER TRANSFORMER	EL	
△ 640	2C	*	L07-0490-05	POWER TRANSFORMER	TX	
△ 640	2C	*	L07-0492-05	POWER TRANSFORMER	M	
△ 640	2C	*	L07-0493-05	POWER TRANSFORMER	P	
A	1C		N08-0128-35	BINDING POST (EARTH)		

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

X:Australia

M:Other Areas

3 : KA-3050R

2 : KA-2050R

△ indicates safety critical components.

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No. 3

Ref. No.	Address	New Parts	Parts No.	Description	Desti-nation	Re-marks
参照番号	位 置	新	部品番号	部品名 / 規 格	仕 向	備考
B	1A, 1C		N09-0301-05	TAPTTIE SCREW (3X8)		
C	2A	*	N09-1445-05	SET SCREW (M3X8)		
D	1B	*	N09-2907-05	SEMS (TAPTTIE SCREW)(3X14)		
E	2A		N30-3006-46	PAN HEAD MACHINE SCREW		
F	1A, 1B		N89-3008-46	BINDING HEAD TAPTTIE SCREW		
G	2C		N89-4006-46	BINDING HEAD TAPTTIE SCREW		
H	1A		N89-4008-45	BINDING HEAD TAPTTIE SCREW		
Q1 , 2		*	2SB1531BT*5	TRANSISTOR		
Q3 , 4		*	2SD2340BT*5	TRANSISTOR		
<b>AUDIO UNIT (X09-360X-XX)</b>						
C1 , 2			CF92FV1H101K	MF 100PF K		
C3 , 4			CF92FV1H471J	MF 470PF J		3
C5 , 6			CE04KW1V100M	ELECTRO 10UF 35WV		2
C7 , -10			CF92FV1H102J	MF 1000PF J		2
C7 , -10			CF92FV1H122J	MF 1200PF J		3
C11 , 12			CC45FSL1H390J	CERAMIC 39PF J		3
C13 , 14			CF92FV1H182J	MF 1800PF J		2
C13 , 14			CF92FV1H332J	MF 3300PF J		3
C15 , 16			CE04KW1E101M	ELECTRO 100UF 25WV		2
C15 , 16			C90-1951-05	ELECTRO 3300UF 6.3WV		3
C17 , 18			CF92FV1H123J	MF 0.012UF J		2
C17 , 18			CF92FV1H393J	MF 0.039UF J		3
C19 , 20			CF92FV1H113J	MF 0.011UF J		3
C21 , 22			CF92FV1H332J	MF 3300PF J		2
C21 , 22			CB04KW1H220M	ELECTRO 22UF 50WV		
C23 , 24			CF92FV1H272J	MF 2700PF J		2
C23 , 24			CF92FV1H392J	MF 3900PF J		3
C25 , -38			CF92FV1H151K	MF 150PF K		
C39 , 40			CB04KW1V4R7M	ELECTRO 4.7UF 35WV		
C41 , 42		*	C90-1971-05	ELECTRO 10UF 50WV		
C43 , 44			CF92FV1H101K	MF 100PF K		
C45 , 46			CF92FV1H331K	MF 330PF K		
C47 , 48			CF92FV1H683J	MF 0.068UF J		
C49 , 50		*	C90-1971-05	ELECTRO 10UF 50WV		
C51 , 52			CF92FV1H121K	MF 120PF K		
C53 , 54			CF92FV1H221K	MF 220PF K		
C59 , 60			CC45FSL2H390J	CERAMIC 39PF J		
C61 , 62			CE04KW1H101M	ELECTRO 100UF 50WV		
C63 , 64			CF92FV1H103J	MF 0.010UF J		
C65 , 66			CE04KW1V100M	ELECTRO 10UF 35WV		
C67 , 68			CC45FSL1H050C	CERAMIC 5.0PF C		
C69 , 70		*	C90-1972-05	ELECTRO 100UF 6.3WV		
C71 , 78			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C79 , 80			CK45FB1H222K	CERAMIC 2200PF K		
C81 , 88			CF92FV1H104J	MF 0.10UF J		
C89 , -92			CF92FV1H472J	MF 4700PF J		
C93 , -98			CK45FB1H102K	CERAMIC 1000PF K		
C99 , 100			CF92FV1H103J	MF 0.010UF J		
C111 , 113			CK45FB1H103Z	CERAMIC 0.010UF Z		
C114 , 115			CC45FSL1H221J	CERAMIC 220PF J		
C116 , 117		*	C90-1963-15	ELECTRO 5600UF 42WV		2
C116 , 117		*	C90-1968-15	ELECTRO 6800UF 50WV		3
C118			CE04KW1E102M	ELECTRO 1000UF 25WV		
C119			CK45FF1H103Z	CERAMIC 0.010UF Z		

L:Scandinavia

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T:England

E:Europe

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X:Australia

M:Other Areas

3 : KA-3050R

2 : KA-2050R

△ indicates safety critical components.

# PARTS LIST

KA-2050R/3050R

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht geliefert.

No. 4

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規 格	Desti- nation 仕 向	Re- marks 備考
C120			CF92FV1H104J	MF 0.10UF J		
C121			CE04KW1V100M	ELECTRO 1.0UF 35WV		
C122			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C123			CE04KW1A470M	ELECTRO 47UF 10WV		
C124			CK45FF1H223Z	CERAMIC 0.022UF Z		
C125-127			CB04KW1V100M	ELECTRO 1.0UF 35WV		
C128			CK45FF1H103Z	CERAMIC 0.010UF Z	ELTXM	
C129			C90-1917-05	ELECTRO 1.0UF 16WV		
C130			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C131,132			CF92FV1H103J	MF 0.010UF J		
C133			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C134			CK45FF1H103Z	CERAMIC 0.010UF Z	ELTXM	
C135			CF92FV1H103J	MF 0.010UF J		
C136,137	*		C90-1971-05	ELECTRO 1.0UF 50WV		
C138,139			CE04KW1E101M	ELECTRO 1.00UF 25WV		
C140,141			CE04KW1C470M	ELECTRO 47UF 16WV		
C142,143			CE04KW1H101M	ELECTRO 1.00UF 50WV		
C144,145			CF92FV1H103J	MF 0.010UF J		
C146,147			CC45FSL1H101J	CERAMIC 100PF J		
C148,149			CE04KW1A101M	ELECTRO 100UF 10WV		
C150,151			CE04KW1V100M	ELECTRO 1.0UF 35WV		
C152,153			CE04KW1E221M	ELECTRO 220UF 25WV		
C154			CK45FF1H103Z	CERAMIC 0.010UF Z	ELTXM	3
C155,156			CE04KW1V100M	ELECTRO 1.0UF 35WV		
C157,158			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C159			CC45FSL1H221J	CERAMIC 220PF J		
C160			CE04KW1H010M	ELECTRO 1.0UF 50WV		
J1			E11-0188-05	MINIATURE PHONE JACK SYNCRO		
J2			E11-0208-05	PHONE JACK PHONES		
J3			E13-0235-05	PHONE JACK PHONO		
J4			E13-0634-05	PHONE JACK CD/TUNER/AUX		
J5			E13-0820-05	PHONE JACK TAPE/DAT MONITOR		
J7	*		E70-0018-05	SCREW TERMINAL BOARD SPEAKERS	ETXMP	
J7	*		E70-0019-05	SCREW TERMINAL BOARD SPEAKERS	L	
▲ F4 ,5			F04-5022-05	FUSE (UL) (125V 5A UL)	P	2
▲ F4 ,5			F05-6029-05	FUSE (UL) (125V 6A)	P	3
▲ F6			F04-1026-05	FUSE (UL) (250V 1A)	ELTXM	
▲ F6			F06-1022-05	FUSE (SEMKO) (250V TIA)		
-			J11-0098-05	WIRE CLAMPER		
CN7 -12			J13-0075-05	FUSE CLIP	P	
CN11,12			J13-0075-05	FUSE CLIP	ELTXM	
L1 ,2			L40-1011-47	SMALL FIXED INDUCTOR(100UH,K)		
L3 ,4			L39-0085-05	PHASE COMPENSATION COIL		
L11 ,12			L40-1011-17	SMALL FIXED INDUCTOR(100UH,K)		
L15 ,16			L40-2211-17	SMALL FIXED INDUCTOR(220UH,K)		
CP1 ,2			R90-0187-05	MULTI-COMP 0.22X2 K 5W		
R23 ,24			RN14BK2C2613FTS	RN 261K F 1/6W		2
R23 ,24			RN14BK2C8252FTS	RN 82.5K F 1/6W		3
R25 ,26			RN14BK2C6811FTS	RN 6.81K F 1/6W		3
R111,112			RD14AB2E472JTS	FL-PROOF RD 4.7K J 1/4W		
R113-118			RD14AB2E680JTS	FL-PROOF RD 68 J 1/4W		
R119,120			RD14AB2E100JTS	FL-PROOF RD 10 J 1/4W		
R129-132			RD14AB2E101JTS	FL-PROOF RD 100 J 1/4W		

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\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht geliefert.

No. 5

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規 格	Desti- nation 仕 向	Re- marks 備考
R133,134			RD14AB2E332JTS	FL-PROOF RD 3.3K J 1/4W		
R135,136			RD14AB2E102JTS	FL-PROOF RD 1.0K J 1/4W		
R141-144			RS14GB3A100JKW	FL-PROOF RS 10 J 1W		
R145,146	*		RS14GB3A0R2JKW	FL-PROOF RS 8.2 J 1W		
R147,148			RS14DB3D151JTE	FL-PROOF RS 150 J 2W		
R167			RS14DB3A471JTE	FL-PROOF RS 470 J 1W		2
R167			RS14DB3A821JTE	FL-PROOF RS 820 J 1W		3
R168			RS14DB3A330JTE	FL-PROOF RS 33 J 1W		
R173			RD14AB2E680JTS	FL-PROOF RD 68 J 1/4W		
R179			RD14AB2E470JTS	FL-PROOF RD 47 J 1/4W		
R181			RD14AB2E332JTS	FL-PROOF RD 3.3K J 1/4W		2
R181			RD14AB2E392JTS	FL-PROOF RD 3.9K J 1/4W		3
R191,192	*		RS14GB3D331JKW	FL-PROOF RS 330 J 2W		
R193,194			RD14AB2E392JTS	FL-PROOF RD 3.9K J 1/4W		2
R193,194			RD14AB2E8472JTS	FL-PROOF RD 4.7K J 1/4W		3
R197			RD14AB2E472JTS	FL-PROOF RD 4.7K J 1/4W		
R211,212			RS14DB3A821JTE	FL-PROOF RS 820 J 1W		3
VRI ,2			R12-1616-05	TRIMMING POT.(1K) IDLEING		
VRI1			R29-5068-05	POTENTIOMETER(100K) VOLUME		
VRI2			R05-5037-05	POTENTIOMETER(200K) BALANCE		
K1			S76-0005-05	MAGNETIC RELAY		
K2			S76-0015-05	MAGNETIC RELAY		
S1	*		S68-0010-05	PUSH SWITCH SPEAKERS A/B		
S2			S40-6035-05	PUSH SWITCH MM/MC		3
D1 , -30			HSS104	DIODE		
D1 , -30			ISS133	DIODE		
D31 , 32			HSS104A	DIODE		
D31 , 32			ISS131	DIODE		
D51			D5SB820F03	DIODE		
D51			RBV-602LFA	DIODE		
D52 , -55			S5688B	DIODE		
D56 , 57			HSS104	DIODE		
D56 , 57			ISS133	DIODE		
D58 , 59			HSS104A	DIODE		
D58 , 59			ISS131	DIODE		
D60			HZ5.1S(B2)	ZENER DIODE		
D60			R05.1JS(B2)	ZENER DIODE		
D61 , 62			HZ57.5S(B)	ZENER DIODE		
D61 , 62			R07.5JS(B)	ZENER DIODE		
D63 , -69			HSS104	DIODE		
D63 , -69			ISS133	DIODE		
D70 , -74			HZ57.5S(B)	ZENER DIODE		
D70 , -74			R07.5JS(B)	ZENER DIODE		
D75			HZS20S(B)	ZENER DIODE		
D75			RD20JS(B)	ZENER DIODE		
D76			HZ55.1S(B2)	ZENER DIODE		
D76			R05.1JS(B2)	ZENER DIODE		
D77 , -84			HSS104	DIODE		
D77 , -84			ISS133	DIODE		
D85			HZ57.5S(B)	ZENER DIODE		
D85			R07.5JS(B)	ZENER DIODE		
IC1			NJM4565D	IC(COP AMP X2)		
IC1			NJM4580D-D	IC(COP AMP X2)		
IC2			LC7821N	IC(FUNCTION CONTROL SWITCH)		3
						2

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## PARTS LIST

No. 7

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No. 6

Ref. No.	Address	New Parts	Parts No.	Description	Desti- nation	Re- marks
参照番号	位 置	新	部品番号	部品名 / 規格	仕 向	備考
IC3			NJM4580D-D	IC(OP AMP X2)		
IC4			TC9163N	IC(BILATERAL SWITCH X16)		
IC5			TAB409S	IC(MOTOR CONTROL)		
IC6			TA7805S	IC(VOLTAGE REGULATOR/+5V)		
IC6			UPC7805AHF	IC(VOLTAGE REGULATOR/+5V)		
IC7			NJM4565D-D	IC(OP AMP X2)		
Q1 -4			2SK170(BL)	FET		
Q1 -4			2SK170(V)	FET		
Q5 -10			2SC2878(B)	TRANSISTOR		
Q11 -14			2SC1645(F,E)	TRANSISTOR		
Q15 -18			2SA992(F,E)	TRANSISTOR		
Q19 ,20			2SC1845(F,E)	TRANSISTOR		
Q21 ,22			2SC4137(V,W)	TRANSISTOR		
Q23 ,24			2SC2458(Y,GR)	TRANSISTOR		
Q23 ,24			2SC3311A(Q,R)	TRANSISTOR		
Q51			2SA1048(Y,GR)	TRANSISTOR		
Q51			2SA1309A(Q,R)	TRANSISTOR		
Q52 ,53			2SC2458(Y,GR)	TRANSISTOR		
Q52 ,53			2SC3311A(Q,R)	TRANSISTOR		
Q54 ,55			2SC2003(L,K)	TRANSISTOR		
Q56			DTA124ES	DIGITAL TRANSISTOR		
Q56			UN4112	DIGITAL TRANSISTOR		
Q57 ,58			DTC124ES	DIGITAL TRANSISTOR		
Q57 ,58			UN4212	DIGITAL TRANSISTOR		
Q59			DTA124ES	DIGITAL TRANSISTOR		
Q59			UN4112	DIGITAL TRANSISTOR		
Q60			2SD863(E,F)	TRANSISTOR		
Q61			2SB764(E,F)	TRANSISTOR		
Q62 ,63			2SD863(E,F)	TRANSISTOR		

## CONTROL UNIT (X11-3XX-XX)

D1		B30-1291-05	LED(LN21CPSLX(V)-(TA4))		
D14 -22		B30-1291-05	LED(LN21CPSLX(V)-(TA4))		
C1 ,2		CE04KW1HR33M	ELECTRO	0.33UF	50WV
C3 -8		CF92FV1H101K	MF	100PF	K
C9 -12	*	C90-1969-05	ELECTRO	0.33UF	50WV
C13 -16	*	C90-1970-05	ELECTRO	10UF	35WV
C17 -20		CF92FV1H223J	MF	0.022UF	J
C21 ,22		CE04KW1H010M	ELECTRO	1.0UF	50WV
C23 ,24		CF92FV1H561J	MF	560PF	J
C51		CE04KW1E470M	ELECTRO	47UF	25WV
C52		CF92FV1H103J	MF	0.010UF	J
C53		CE04KW1E470M	ELECTRO	47UF	25WV
C54		CF92FV1H103J	MF	0.010UF	J
C55 ,56		CE04KW1HR33M	ELECTRO	0.33UF	50WV
C57		C90-3244-05	ELECTRO	10UF	35WV
C58		CK45FF1H103Z	CERAMIC	0.010UF	Z
C59		C90-3256-05	ELECTRO	4.7UF	50WV
C60		C90-3253-05	ELECTRO	1UF	50WV
C61		C90-3244-05	ELECTRO	10UF	35WV
C62		CE04KW1H010M	ELECTRO	1.0UF	50WV
C63		CK45FF1H103Z	CERAMIC	0.010UF	Z
C64		CE04KW1A101M	ELECTRO	100UF	10WV
C65		C90-1827-05	BACKUP FILM	0.047F	5.5WV
C66 ,67		C91-1439-05		0.01UF	250VAC

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Ref. No.	Address	New Parts	Parts No.	Description	Desti- nation	Re- marks
参照番号	位 置	新	部品番号	部品名 / 規格	仕 向	備考
△ J1			* B03-0131-05	AC OUTLET		ELM
△ J2			E03-0111-05	AC OUTLET		P
△ J3 -5			E03-0109-05	AC OUTLET		T
△ F1			F04-2025-05	FUSE (UL) (250V 2A)		2
△ F1			F05-1623-05	FUSE (SEMKO) (250V T1.6A)		ELTX 3
△ F1			F05-4028-05	FUSE (UL) (125V 4A)		P 3
△ F1			F06-1022-05	FUSE (SEMKO) (250V T1A)		ELTX 2
△ F1 ,2			F05-1623-05	FUSE (SEMKO) (250V T1.6A)		M 3
△ F1 ,2			F06-1022-05	FUSE (SEMKO) (250V T1A)		EL 2
△ F3			F05-2525-05	FUSE (SEMKO) (250V T2.5A)		EL
CN1 -4			J13-0075-05	FUSE CLIP		M
CN1 ,2			J13-0075-05	FUSE CLIP		ELXP
CNS ,6			J13-0075-05	FUSE CLIP		EL
L1 ,2			L40-1021-14	SMALL FIXED INDUCTOR(1.0MH,K)		
X1			L78-0209-05	RESONATOR 4.194MHZ		
R89			RD14AB2E680JTS	FL-PROOF RD 68 J 1/4W		
VR1 ,2			RO6-3061-05	POTENTIOMETER BASS,TREBLE		
K1			S76-0009-05	MAGNETIC RELAY		
S1 -5			S40-1064-05	PUSH SWITCH KEY BOARD		
S1 ,2			S40-1064-05	PUSH SWITCH POWER,TAPE2/DAT		2
S4 ,5			S40-1064-05	PUSH SWITCH SOURCE DIR,LOUDNES		2
S7			S31-2322-05	SLIDE SWITCH VOLTAGE SELECTOR		M
S6		*	T99-0526-05	ROTARY ENCODER INPUT SELECTOR		
D3 -8			HSS104	DIODE		
D3 -8			1SS133	DIODE		
D9			HZS5.1S(B2)	ZENER DIODE		
D9			RD5.1JS(B2)	ZENER DIODE		
D10 -13			HSS104	DIODE		
D10 -13			1SS133	DIODE		
D23			1SS133	DIODE		
D23			HSS104	DIODE		
IC1		*	UPD75004CU-145	IC(MICROPROCESSOR)		
IC2			NJM4565D-D	IC(OP AMP X2)		
IC3			PST529C	IC(SYSTEM RESET)		
Q1			2SC2458(Y,GR)	TRANSISTOR		
Q1			2SC3311A(Q,R)	TRANSISTOR		
Q2			2SC2003(L,K)	TRANSISTOR		
A1			W02-1046-05	ELECTRIC CIRCUIT MODULE		

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# KA-2050R/3050R

## SPECIFICATIONS (For U.K. and Europe)

### KA-3050R

<b>Continuous rated power output</b>	
(DIN) 1 kHz, at 8 Ω	55 W + 55 W
at 4 Ω	70 W + 70 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω	55 W + 55 W
at 4 Ω	70 W + 70 W
<b>Dynamic power</b>	65 W (8 Ω)
	70 W (6 Ω)
	85 W (4 Ω)
	100 W (2 Ω)
<b>Damping factor</b>	40 (50 Hz)
<b>Total harmonic distortion</b>	0.05%
	(20 Hz ~ 20,000 Hz, 45 W, 8 Ω)
	0.02% (1 kHz, 45 W, 8 Ω)
<b>Intermodulation distortion</b>	0.05% (45 W, 8 Ω)
	(70 Hz : 7 kHz = 4:1)
<b>Frequency response</b>	
CD	5 Hz ~ 90 kHz, +0 dB, -3 dB
PHONO 'RIAA' response	20 Hz ~ 20 kHz, +0.3 dB, -0.3 dB
<b>Maximum input level</b>	
PHONO (MM)	130 mV, 0.5% T.H.D. at 1 kHz
PHONO (MC)	10 mV, 0.5% T.H.D. at 1 kHz
<b>Signal to noise ratio</b>	
PHONO (MM)	87 dB (IHF '66) 82 dB (IHF '78)
PHONO (MC)	67 dB (IHF '66) 75 dB (IHF '78)
CD/TUNER/AUX/TAPE	101 dB (IHF '66) 85 dB (IHF '78)
PHONO (MM)	60 dB (DIN, 50 mW output)
CD/TUNER/AUX/TAPE	60 dB (DIN, 50 mW output)
<b>Input sensitivity/impedance</b>	
PHONO (MM)	2.5 mV/47 kΩ
PHONO (MC)	0.2 mV/100 Ω
CD/TUNER/AUX/TAPE	200 mV/47 kΩ
<b>Tone control</b>	
BASS	±10 dB (at 100 Hz)
TREBLE	±10 dB (at 10 kHz)
<b>Loudness control</b>	
VOLUME at -30 dB level	+6 dB (100 Hz), +3 dB (10 kHz)
<b>Output level/impedance</b>	
TAPE REC	200 mV/1 kΩ
<b>General</b>	
<b>Power consumption</b>	160 W
<b>AC outlets</b>	
SWITCHED	3; (Total 200 W max.)
<b>Dimensions</b>	W: 440 mm (17-5/16") H: 136 mm (5-3/8") D: 350 mm (13-3/4")
<b>Weight (net)</b>	6.9 kg (15.2 lb)

### KA-2050R

<b>Continuous rated power output</b>	
(DIN) 1 kHz, at 8 Ω	35 W + 35 W
at 4 Ω	45 W + 45 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω	35 W + 35 W
at 4 Ω	40 W + 40 W
<b>Dynamic power</b>	45 W (8 Ω)
	50 W (6 Ω)
	60 W (4 Ω)
	70 W (2 Ω)
<b>Damping factor</b>	40 (50 Hz)
<b>Total harmonic distortion</b>	0.05%
	(20 Hz ~ 20,000 Hz, 30 W, 8 Ω)
	0.02% (1 kHz, 30 W, 8 Ω)
<b>Intermodulation distortion</b>	0.05% (30 W, 8 Ω)
	(70 Hz : 7 kHz = 4:1)
<b>Frequency response</b>	
CD	5 Hz ~ 90 kHz, +0 dB, -3 dB
PHONO 'RIAA' response	20 Hz ~ 20 kHz, +0.3 dB, -0.3 dB
<b>Maximum input level</b>	
PHONO (MM)	130 mV, 0.5% T.H.D. at 1 kHz
Signal to noise ratio	
PHONO (MM)	77 dB (IHF '66) 80 dB (IHF '78)
CD/TUNER/AUX/TAPE	101 dB (IHF '66) 85 dB (IHF '78)
PHONO (MM)	58 dB (DIN, 50 mW output)
CD/TUNER/AUX/TAPE	60 dB (DIN, 50 mW output)
<b>Input sensitivity/impedance</b>	
PHONO (MM)	2.5 mV/47 kΩ
CD/TUNER/AUX/TAPE	200 mV/47 kΩ
<b>Tone control</b>	
BASS	±10 dB (at 100 Hz)
TREBLE	±10 dB (at 10 kHz)
<b>Loudness control</b>	
VOLUME at -30 dB level	+6 dB (100 Hz), +3 dB (10 kHz)
<b>Output level/impedance</b>	
TAPE REC	200 mV/1 kΩ
<b>General</b>	
<b>Power consumption</b>	120 W
<b>AC outlets</b>	
SWITCHED	3; (Total 200 W max.)
<b>Dimensions</b>	W: 440 mm (17-5/16") H: 136 mm (5-3/8") D: 350 mm (13-3/4")
<b>Weight (net)</b>	6.0 kg (13.2 lb)

# KA-2050R/3050R

## SPECIFICATIONS (For other countries)

### KA-3050R

Continuous rated power output	
(IHF '66) From 20 Hz to 20,000 Hz	0.05% T.H.D.
at 8 Ω .....	45 W + 45 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω .....	55 W + 55 W
at 4 Ω .....	70 W + 70 W
Dynamic power .....	65 W (8 Ω) 70 W (6 Ω) 85 W (4 Ω) 100 W (2 Ω)
Damping factor .....	40 (50 Hz)
Total harmonic distortion .....	0.05% (20 Hz ~ 20,000 Hz, 45 W, 8 Ω) 0.02% (1 kHz, 45 W, 8 Ω)
Intermodulation distortion .....	0.05% (45 W, 8 Ω) (70 Hz : 7 kHz = 4:1)
Frequency response	
CD .....	5 Hz ~ 90 kHz, +0 dB, -3 dB
PHONO 'RIAA' response .....	20 Hz ~ 20 kHz, +0.3 dB, -0.3 dB
Maximum input level	
PHONO (MM) .....	130 mV, 0.5% T.H.D. at 1 kHz
PHONO (MC) .....	10 mV, 0.5% T.H.D. at 1 kHz
Signal to noise ratio	
PHONO (MM) .....	87 dB (IHF '66) 82 dB (IHF '78)
PHONO (MC) .....	67 dB (IHF '66) 75 dB (IHF '78)
CD/TUNER/AUX/TAPE .....	101 dB (IHF '66) 85 dB (IHF '78)
Input sensitivity/impedance	
PHONO (MM) .....	2.5 mV/47 kΩ
PHONO (MC) .....	0.2 mV/100 Ω
CD/TUNER/AUX/TAPE .....	200 mV/47 kΩ
Tone control	
BASS .....	±10 dB (at 100 Hz)
TREBLE .....	±10 dB (at 10 kHz)
Loudness control	
VOLUME at -30 dB level .....	+6 dB (100 Hz), +3 dB (10 kHz)
Output level/impedance	
TAPE REC .....	200 mV/1 kΩ
General	
Power consumption .....	160 W
AC outlets	
SWITCHED .....	3; (Total 200 W max.) For Australia 2; (Total 200 W max.)
Dimensions .....	W: 440 mm (17-5/16") H: 136 mm (5-3/8") D: 350 mm (13-3/4")
Weight (net) .....	6.9 kg (15.2 lb)

Kenwood follows a policy of continuous advancements in development.  
For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement.  
Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an.  
Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

### Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the general market (M) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

### KA-2050R

Continuous rated power output	
(IHF '66) From 20 Hz to 20,000 Hz 0.05% T.H.D.	
at 8 Ω .....	30 W + 30 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω .....	35 W + 35 W
at 4 Ω .....	40 W + 40 W
Dynamic power .....	45 W (8 Ω) 50 W (6 Ω) 60 W (4 Ω) 70 W (2 Ω)
Damping factor .....	40 (50 Hz)
Total harmonic distortion .....	0.05% (20 Hz ~ 20,000 Hz, 30 W, 8 Ω) 0.02% (1 kHz, 30 W, 8 Ω)
Intermodulation distortion .....	0.05% (30 W, 8 Ω) (70 Hz : 7 kHz = 4:1)
Frequency response	
CD .....	5 Hz ~ 90 kHz, +0 dB, -3 dB
PHONO 'RIAA' response .....	20 Hz ~ 20 kHz, +0.3 dB, -0.3 dB
Maximum input level	
PHONO (MM) .....	130 mV, 0.5% T.H.D. at 1 kHz
Signal to noise ratio	
PHONO (MM) .....	77 dB (IHF '66) 80 dB (IHF '78)
CD/TUNER/AUX/TAPE .....	101 dB (IHF '66) 85 dB (IHF '78)
Input sensitivity/impedance	
PHONO (MM) .....	2.5 mV/47 kΩ
CD/TUNER/AUX/TAPE .....	200 mV/47 kΩ
Tone control	
BASS .....	±10 dB (at 100 Hz)
TREBLE .....	±10 dB (at 10 kHz)
Loudness control	
VOLUME at -30 dB level .....	+6 dB (100 Hz), +3 dB (10 kHz)
Output level/impedance	
TAPE REC .....	200 mV/1 kΩ
General	
Power consumption .....	120 W
AC outlets	
SWITCHED .....	3; (Total 200 W max.) For Australia 2; (Total 200 W max.)
Dimensions .....	W: 440 mm (17-5/16") H: 136 mm (5-3/8") D: 350 mm (13-3/4")
Weight (net) .....	6.0 kg (13.2 lb)

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